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LETTER STATING MONITORING ONLY PROGRAM WILL BE IMPLEMENTED AT D STREET BUILDING 376 DUE TO SITE RANKING DATED 28 JULY 1994 MILLINGTON SUPPACT TN
8/2/1994
TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
MEMPHIS ENVIRONMENTAL FIELD OFFICE
SUITE E-645, PERIMETER PARK
2510 MT. MORIAH
MEMPHIS, TENNESSEE 38115-1520

August 2, 1994

CERTIFIED MAIL Z 106 531 639
RETURN RECEIPT REQUESTED

Ms. Tonya Barker
Department of the Navy, NAS Memphis
Public Works, Environmental Division
Code 0101, 7800 Third Avenue
Millington, TN 38054

RE: Site Ranking
NAS Fuel Facility
"D" Street Building 376, Memphis, TN
UST Facility ID # 0-791673, Shelby County

Dear Ms. Barker:

The Division of Underground Storage Tanks has reviewed the Site Ranking dated July 28, 1994 for the above referenced facility. Based upon the submitted data the Division approves the Site Ranking Request. A Monitoring Only Program shall be implemented at this site. Federal Express shall monitor the site in accordance with the enclosed Technical Guidance Document (TGD) -007.

If you have any questions concerning this matter, contact me at (901) 368-7973.

Sincerely,

Ghattas Murr
Division of Underground Storage Tanks

GEM\79014214\ag

Enclosures: Technical Guidance Document-007

c: Nashville UST Central Office - Technical Review Section
Memphis UST Field Office

STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION

Division of Underground Storage Tanks

Technical Guidance Document - 007

Effective Date -January 1, 1994

RE: Monitoring at UST Sites

The purpose of this Technical Guidance Document (TGD) is to assist the regulated community in determining the requirements for periodic monitoring and reporting at UST sites.

All work associated with this TGD shall be conducted in accordance with the applicable sections of the Environmental Assessment Guidelines.

I. Monitoring Program Components

A. Comprehensive

Comprehensive Monitoring shall consist of the following activities in sequence:

1. Water

   a. Obtaining water level measurements from all monitoring wells;

   b. Sampling all monitoring wells and recovery wells; and,

   c. Sampling all springs and water supplies approved by the Division

2. Vapor monitoring of all subsurface structures (i.e. basements, utility vaults, sewers, etc.) within the contaminant plume(s). All structures which have been previously impacted by petroleum vapors, shall also be monitored.

B. Site Status

Site Status Monitoring shall consist of the following activities:

1. Water

   a. Obtaining water level measurements from all monitoring wells;

   b. Sampling all monitoring wells approved by the Division;

c. Sampling all springs and water supplies approved by the Division; and,

d. Sampling the influent and effluent of the ground water treatment system, if applicable.

2. Vapor Monitoring of all subsurface structures (i.e. basements, utility vaults, sewers, etc.) within the contaminant plume(s). All structures which have been previously impacted by petroleum vapors, shall also be monitored.

3. Emissions Monitoring from the soil vapor extraction system, if applicable. At a minimum, measurements of the total volatiles as measured by an organic vapor detector, O_2, and CO_2 shall be taken.

C. Soil

Soil Monitoring shall consist of the installation of one boring in the location where the highest level of soil contamination is known to exist through previous site assessment activities.

II. Monitoring Programs

A. Corrective Action

Corrective Action Monitoring shall be performed upon approval of the Corrective Action Plan by the Division, and consist of the following:

1. Comprehensive Monitoring shall be conducted prior to the start-up of the ground water corrective action system.

2. Site Status Monitoring shall be conducted semiannually (twice a year) thereafter until the ground water contaminant concentrations decrease below the applicable cleanup levels. Closure Monitoring shall commence 20 to 30 days after the Division approves the termination of the ground water corrective action system in accordance with Item C. below.

3. Soil Monitoring shall commence two years after the soil corrective action system becomes operational. It shall continue every two years until the soil contaminant concentrations decrease below the applicable cleanup levels.

B. Monitoring Only

A monitoring only program shall be implemented upon the Division's approval and consist of the following:

1. Comprehensive Monitoring shall be conducted 20 to 30 days after the Division approves a monitoring only request.

2. Site Status Monitoring shall be conducted semiannually (twice a year) thereafter until:

   a. Contaminant concentrations are below the applicable cleanup levels; or,

   b. The Division requires additional activities.

   If the analytical results indicate contaminant concentrations have decreased below the applicable cleanup levels, Closure Monitoring shall commence the next quarter in accordance with Item C. below and upon approval of the Division.

3. Soil Monitoring shall be performed every two years, until the soil contaminant concentrations are below the applicable cleanup levels or the Division requires additional activities.

C. Closure

Closure Monitoring is to determine that the ground water contaminant concentrations remain below the applicable cleanup levels for one year and consist of four (4) consecutive quarters of sampling using the following procedures:

1. Comprehensive Monitoring shall be conducted 20 to 30 days after the Division approves the start of a Closure Monitoring Program.

2. Site Status Monitoring shall be performed the second and third quarters.

3. Comprehensive Monitoring shall be conducted the fourth quarter.

If contaminant concentrations are detected above the applicable cleanup levels during closure program, additional activities associated with corrective action shall be required.

The Division reserves the right to modify these monitoring requirements at any time.

III. Report Preparation

Within thirty (30) days after sample collection, a report shall be prepared and submitted containing the following information:

A. Progress

If any corrective action has taken place since the last report, briefly describe the progress of the corrective action system(s) to date.

1. Based upon the readings taken during routine O & M visits to the site, what is the average flow rate and the estimated total gallons of water treated for the reporting period. (Report this amount in Table 1)

2. Based upon the last analytical results obtained during the reporting period, estimate the total pounds of Benzene and TPH removed via ground water treatment during the reporting period and the total pounds removed to date. Include all calculations. (Report this amount in Table 1)

3. Provide in Table 1 the monthly O & M costs incurred at the site and the total O & M costs to date. O & M costs shall include but not be limited to the following: all personnel time on and off site, report preparation, analytical costs, equipment rental, supplies, capital equipment, repairs, utilities, fees, per diem and mileage. If modifications are made to the system, briefly explain the modifications and why they were necessary.

B. Problems

Briefly describe any problems which have been encountered with the corrective action system(s) since the previous report and the actions taken to resolve the problem. Report the percent of time the treatment system was out of operation during the reporting period due to system failure. (Report this amount in Table 1)

C. Water Monitoring

1. Potentiometric Data

a. Provide a table, prepared in accordance with Section D.1.c. of the Environmental Assessment Report Guidelines (EARG), from the data collected during the last two monitoring periods.

b. Provide two potentiometric maps, prepared in accordance with Section D.1.d of the EARG, from the data collected during the last two monitoring periods.

2. Analytical Data

a. Provide a table, prepared in accordance with Section D.5 of the EARG, for the water analytical results from the last four (4) monitoring periods.

Include in an appendix the laboratory analysis sheets from the most recent sampling event.

b. If Comprehensive Monitoring was conducted during the current monitoring period provide a plume map(s) prepared in accordance with Section D.7.a. of the EARG.

D. Vapor Monitoring Results

Describe the results of the vapor monitoring. Provide a map showing the locations of the sampling points and a table indicating the results of the sampling.

E. Emissions Monitoring Results

Describe the results obtained from the monitoring of any soil vapor extraction systems and provide a table with the results of the last four sampling events.

F. Soil Monitoring Results

Describe the results of any soil sampling if it was conducted during the reporting period. Provide a table with all soil analytical results obtained in accordance with this TGD.

G. Additional Information

Provide any additional information which was included in the approved CAP or required by the Division. If applicable, provide this additional information in tables or maps, in an appropriate format.

Signature Page

I certify under penalty of law, including but not limited to penalties for perjury, that the information contained in this report and on any attachments, is true, accurate and complete to the best of my knowledge, information, and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for intentional violations.

Owner/Operator (Print)	Signature	Date
P.E. or P.G. (Print)	Signature TN Lic./Reg. #	Date

If a P.E. signs the report, please indicate the area of expertise.

(Print or Type) Stamp/Seal

All signatures above must be notarized.

STATE OF _____

Sworn to and subscribed before me by _____ on this date

_____

My commission expires _____

_____
Notary Public - Print Name

_____
Signature

MONITORING REPORT
Table 1

TN UST FACILITY ID NUMBER:_____

Reporting Period	From: To:	From: To:	From: To:	From: To:
Avg. Flow Rate GPM				
Total Gallons Pumped Per Period				
Cumulative Total-Gallons Pumped				
% Time System Was Down				
Pounds of Benzene Removed-H2O Phase				
Cumulative Pounds of Benzene Removed-H2O				
Pounds of TPH Removed-H2O Phase				
Cumulative Pounds of TPH Removed-H2O Phase				

The Reporting Period described above shall be a six month interval.

Month						
# of Site Visits/Mo.						
O & M Costs per Month						
O&M Costs To Date						

The Reporting Period for O & M costs is monthly.

UST Monitoring Program Summary

Table 1

Monitoring Program Components	Frequency	Description
Comprehensive (Water and Vapor)	Four (4) Times 1. Before CA system startup (Baseline) 2. Upon system shutdown(1st qtr. of Closure Monitoring) 3. The 4th quarter of Closure Monitoring 4. Before beginning a Monitoring Only Program	Sample all monitoring wells and recovery wells. Also all springs and water supplies proposed by the CAC and approved by the Division. Monitor for vapors in all subsurface structures (i.e. basement, sewers, utilities) within the contaminant plume(s). Also any structure previously impacted by petroleum vapors.
Site Status (Water, Vapor, and Emissions)	1. Semiannually during the operation of the corrective action system. 2. Semiannually during Monitoring Only 3. During the 2nd and 3rd quarter of Closure Monitoring.	Sample all monitoring wells proposed by the CAC and approved by the Division. The influent and effluent of the treatment system. Monitor for vapors in all subsurface structures (i.e. basement, sewers, utilities) within the contaminant plume(s). Also any structure previously impacted by petroleum vapor Monitoring of the systems air effluent.
Soil	Every two years until achieving soil cleanup goals.	One boring in the area of highest soil contamination to monitor contaminant reduction.